


CLAIMS

1. A structure comprising:
a buried cavity in a semiconductor material body having a shape, in cross section, in which a top wall is approximately parallel with a horizontal plane of the semiconductor material body, side walls slope inward from the top wall to a bottom wall, and the bottom wall is approximately parallel with the top wall.
2. The structure according to claim 1, wherein the top wall comprises a lattice of a first and a second layer, said first layer comprising silicon-dioxide, said second layer comprising silicon-nitride.
3. The structure according to claim 2, wherein said lattice has a plurality of interstitial openings.
4. The structure according to claim 3, wherein said plurality of interstitial openings in the lattice are filled with tetraethyl orthosilicate.
5. The structure according to claim 3, wherein said plurality of interstitial openings in the lattice are filled with polycrystalline silicon.
6. The structure according to claim 5, wherein said top wall of said buried cavity further comprises a grown, and wherein communication openings extend through said grown layer and said lattice layer to said buried cavity.
7. The structure according to claim 3, wherein each of said plurality of interstitial openings has a square shape, as viewed from above the horizontal plane of the semiconductor material body.

8. The structure according to claim 3, wherein each of said plurality of interstitial openings has a rectangular shape, as viewed from above the horizontal plane of the semiconductor material body.

9. The structure according to claim 2, wherein said lattice is oriented to an angle of between 44° and 46° with respect to a flat of said semiconductor material body.

10. The structure according to claim 2, wherein said lattice is oriented to an angle of between 30° and 60° with respect to a particular crystallographic plane of said semiconductor material body.

11. A structure, comprising:
a semiconductor material body; 
a cavity formed within the body, the cavity having a substantially planar lower surface lying in a plane that is approximately parallel to a plane of an upper surface of the body;
a cover over the cavity comprising a coating layer formed on the upper surface of the body; and
a communication opening extending in the cover as far as the cavity.

12. The structure of claim 11 wherein the cover further comprises a lattice layer formed on the upper surface of the body.

13. The structure of claim 11 wherein the coating layer is a polycrystalline-silicon layer.

14. The structure of claim 13, further comprising a layer grown on the polycrystalline-silicon layer.

15. A structure, comprising:
a semiconductor material body;
a cavity formed within the body;;
a cover over the cavity comprising a lattice layer having a plurality of openings,
formed on an upper surface of the body, and a coating layer formed on the lattice layer, the
coating layer closing the plurality of openings; and
a communication opening extending in the cover as far as the cavity.

16. The structure of claim 15 wherein the coating layer is a polycrystalline-silicon layer.

17. The structure of claim 16, further comprising a layer grown on the polycrystalline-silicon layer.